

**VOSH PROGRAM DIRECTIVE: 12-254A****ISSUED: February 1, 2013****Subject****Cranes and Derricks in Construction, §§ 1926.1400 through 1926.1442:**

- **Other Related Standards; and**
- **Demolition and Underground Construction**

**Purpose**

**CHANGE I:** This Directive transmits to field personnel federal OSHA's revised final rule on Cranes and Derricks in Construction, and other related standards. **CHANGE II:** This change brings all crane and derrick use in construction work under new Subpart CC and corrects errors in the final rule that substantively altered the demolition and underground construction provisions, and restores subparagraphs §1926.800(t)(1) through (4).

*This Program Directive is an internal guideline, not a statutory or regulatory rule, and is intended to provide instructions to VOSH personnel regarding internal operation of the Virginia Occupational Safety and Health Program and is solely for the benefit of the program. This document is not subject to the Virginia Register Act or the Administrative Process Act; it does not have general application and is not being enforced as having the force of law.*

**Scope**

This directive applies to all VOSH personnel.

**Reference**

CHANGE I: 75 FR 47906 (August 9, 2010)  
CHANGE II: 77 FR 49722 (August 17, 2012)

**Cancellation**

VOSH Program Directive 12-254 (April 1, 2011)

**Effective Date**

**CHANGE I:** April 1, 2011  
**CHANGE II:** January 1, 2013

**Action**

Directors and Managers shall ensure that VOSH field personnel are advised of the changes and that employers are aware of and comply with the requirements of these standards.

**Expiration Date**

Not Applicable.

Courtney M. Malveaux  
Commissioner

Distribution: Commissioner of Labor and Industry  
Assistant Commissioner  
VOSH Directors and Managers  
Legal Support & IMIS Support Staffs

Cooperative Programs Director and Manager  
VOSH Compliance & Cooperative Programs Staff  
OSHA Region III & Norfolk Area Offices

Attachments: CHANGE I: None. Please refer to: [http://www.osha.gov/FedReg\\_oshapdf/FED20100809.pdf](http://www.osha.gov/FedReg_oshapdf/FED20100809.pdf)

CHANGE II: 77 FR 49722 (August 17, 2012) or refer to  
[http://www.osha.gov/FedReg\\_oshapdf/FED20120817A.pdf](http://www.osha.gov/FedReg_oshapdf/FED20120817A.pdf)

## **I. Background - Development of Federal Standard**

**CHANGE I:** In 1998, federal OSHA's expert Advisory Committee for Construction Safety and Health (ACCSH) established a workgroup to develop recommended changes to the standard for cranes and derricks. In December 1999, ACCSH recommended that federal OSHA consider using a negotiated rulemaking process as the mechanism to update subpart N. On July 16, 2002, federal OSHA published a Notice of Intent to Establish a Cranes and Derricks Negotiated Rulemaking Advisory Committee ("C-DAC") (see 67 FR 46612). [75 FR 47907] C-DAC, consisting of 23 experienced Cranes and Derricks Advisory Committee members representing manufacturers' trade associations, was convened in July 2003 and reached consensus on its draft document in July 2004. In 2006, ACCSH recommended that OSHA use the C-DAC consensus document as a basis for federal OSHA's proposed rule, which was published on October 9, 2008 (73 FR 59713). Public hearings were held in March 2009, and the public comment period on those proceedings closed in June 2009. [75 FR 47907]

**CHANGE II:** On August 9, 2010, federal OSHA issued new requirements for Cranes and Derricks in Construction under Subpart CC. For most construction work, the new Cranes and Derricks in Construction Standard replaced the prior cranes and derricks standard, §1926.550, which had been in place for over 40 years. For demolition and underground construction work, however, the protective requirements of §1926.550 were no longer covered in federal OSHA's construction regulations. As a result, federal OSHA had to reestablish the substance of the demolition and underground construction provisions in a new Subpart DD, which was in the updated Cranes and Derricks in Construction Standard.

A second error was made, however. In the rulemaking process for the final rule for Cranes and Derricks in Construction, federal OSHA inadvertently deleted the requirements addressing material, personnel, overhead hoists, and elevators in demolition and underground construction work by requiring employers to follow the requirements of Subpart DD for demolition and underground construction work.

At its meeting on January 20, 2011, the Safety and Health Codes Board adopted the revised Final Rule for Cranes and Derricks in Construction, and other Related Standards, with an effective date of April 15, 2011.

## **II. Summary**

### **CHANGE I.**

#### **A. Overview of Standard**

The revised standard will require employers to perform crane inspections, utilize qualified or certified crane operators, address ground conditions, maintain safe distances from power lines using the encroachment prevention precautions, and to fulfill other obligations under the standards.

Federal OSHA has revised the Cranes and Derricks Standard and other related sections of the Construction Standards to update and specify industry work practices necessary to protect employees during the use of cranes and derricks in construction. This revision also addresses advances in the designs of cranes and derricks, related hazards, and the qualifications of employees needed to operate them safely.

Changes under this revised final rule include requirements that employers:

- determine whether the ground is sufficient to support the anticipated weight of hoisting equipment and associated loads;

- assess hazards within the work zone that would affect the safe operation of hoisting equipment, such as those of power lines and objects or personnel that would be within the work zone or swing radius of the hoisting equipment;
- ensure that the equipment is in safe operating condition through required inspections; and
- train employees in the work zone to recognize hazards associated with the use of the equipment and any related duties that they are assigned to perform.

According to federal OSHA, the new rule is designed to prevent the leading causes of fatalities, including electrocution, crushed-by/struck-by hazards during assembly/disassembly, collapse and overturn. It also sets requirements for ground conditions and crane operator assessment. In addition, the revised final rule addresses tower crane hazards and the use of synthetic slings for assembly/disassembly work, and clarifies the scope of the regulation by providing both a functional description and a list of examples for the equipment that is covered.

The revised standard will also be more protective than the current standards is in assembly/disassembly operations, which along with power line contact, are leading causes of fatalities in crane work. [75 FR 48094]

The revised final rule addresses both the work practices used as well as other requirements for performing construction work involving cranes and derricks. Employers are required to keep specified records associated with inspections and operator certification/qualification. [75 FR 48127]

Other sections in Part 1926 amended as a result of the revised Cranes and Derricks final rule include the following:

- **[Subpart A]**, added §1926.6, Incorporation by reference;
- **[Subpart C – General Safety and Health Provisions]** – §1926.31, [Reserved], was removed and reserved;
- **[Subpart L – Scaffolds]** – §1926.450, Scope, application, and definitions applicable to this subpart, was amended by revising paragraph (a) to reference application to all scaffolds used in workplaces covered by this part, and that it does not apply to crane or derrick suspended personnel platforms;
- **[Subpart M – Fall Protection]** – **§1926.500, Scope, application, and definitions applicable to this subpart**, was amended by revising paragraph (a)(2)(ii), adding paragraph (a)(3)(v), and revising paragraph (a)(4) to reference subpart CC;
- **[Subpart DD – Cranes and Derricks Used in Demolition and Underground Construction]** – added §1926.1500, Scope;
- **[Subpart N – Helicopters, Hoists, Elevators, and Conveyors]** – **amended the heading to subpart N to read: “Subpart N – Cranes, Derricks, Hoists, Elevators, and Conveyors;”**
- §1926.550 [Reserved and former §1926.550 redesignated as §1926.1501];

- §1926.553, Base-mounted drum hoists, was amended by adding paragraph (c), which states that this section does not apply to base-mount drum hoists used in conjunction with derricks, and which requires conformity with §1926.1436.
- **[Subpart O – Motorized Vehicles, Mechanical Equipment, and Marine Operations]** – §1926.600, Equipment, was amended by revising paragraph (a)(6);
- **[Subpart R – Steel Erection]** – §1926.753, Hoisting and rigging, was amended by revising paragraphs (a) and (c)(4) to reference §1926.1431;
- **[Subpart S – Underground Construction, Caissons, Cofferdams, and Compressed Air]** – §1926.800, Underground Construction, was amended by revising paragraph (t) to reference §1926.1501(g) of 1926 subpart DD;
- **[Subpart T– Demolition]** – §§1926.856 and 1926.858, Removal of walls, floors, and material with equipment, were amended by revising paragraph (b) to reference §1926.1501 of 1926.subpart DD;
- **[Subpart V – Power Transmission and Distribution]** – §1926.952, Mechanical equipment, was amended by adding a new paragraph (c), which is now entitled “Cranes and other lifting equipment” to conform with language in §1926.1400 (c)(4), and to ensure that comparable safety requirements exist for digger derricks performing electrical pole work;
- **[Subpart X – Stairways and Ladders]** – §1926.1050, Scope, application, and definitions applicable to this subpart, was amended by revising paragraph (a) to explain that subpart X does not apply to integral components of equipment covered by subpart CC, and to further explain that only subpart CC establishes the circumstances when ladders and stairways must be provided on equipment covered by subpart CC;
- **Appendix A to Part 1926 – Designations for General Industry Standards Incorporated into Body of Construction Standards** – was amended by removing the row containing “1926.550(a)(19)” and “1910.184(c)(9)” from the table “1926 DESIGNATIONS FOR APPLICABLE 1910 STANDARDS;” and
- **Subparts AA and BB** – were reserved and **subpart CC – Cranes and Derricks in Construction**, §§1926.1400 - 1926.1442, was added.

**B. Types of Cranes Included Under the Revised Standard:**

The revised federal standard applies to virtually all power-operated equipment, when used in construction, that can hoist, lower and horizontally move a suspended load, including, but not limited to the following (see §1926.1400 (a)):

- Articulating cranes (i.e., knuckle-boom cranes);
- crawler cranes;
- floating cranes;
- cranes on barges;

- locomotive cranes;
- mobile cranes (i.e., wheel-mounted, rough-terrain, all-terrain, commercial truck-mounted, and boom truck cranes);
- multi-purpose machines when configured to hoist and lower (by means of a winch or hook) and horizontally move a suspended load;
- industrial cranes (i.e., carry-deck cranes);
- dedicated pile drivers;
- service/mechanic trucks with a hoisting device;
- a crane on a monorail;
- tower cranes (i.e., fixed jib, i.e., “hammerhead boom”), luffing boom and self-erecting);
- pedestal cranes;
- portal cranes;
- overhead and gantry cranes;
- straddle cranes;
- sideboom cranes;
- derricks; and
- variations of such equipment.

**C. Exclusions from Subpart CC – Cranes and Derricks in Construction:**

Under §1926.1400 (c) of the revised standard, federal OSHA excluded many lifting devices, including machinery that has been converted to a non-hoisting/lifting use, as well as aerial lifts, forklifts, except when they are configured to hoist and lower by means of a winch or hook and horizontally move a suspended load. Other exclusions from Subpart CC include:

- excavators (track hoe/backhoe);
- concrete pump trucks w/boom;
- digger derricks;
- power shovels;
- wheel loaders;
- automotive wreckers and tow trucks;
- vehicle mounted work platforms;
- self-propelled elevating work platforms;
- stacker cranes;
- telescopic/hydraulic gantry systems;
- mechanics’ trucks with hoisting devices;
- come-a-longs and chain falls;

- gin poles for communication tower work;
- tree trimming and tree removal work;
- anchor handling with a vessel or barge using an affixed A-frame; and
- roustabout lifts;
- helicopter cranes; and
- material delivery

**CHANGE II:** On August 17, 2012, federal OSHA issued a Direct Final Rule, along with a companion notice of proposed rulemaking [77 FR 49741], that applies the requirements of the August 2010 Final Rule for Cranes and Derricks in Construction to demolition work and underground construction.

This Direct Final Rule has applied the same crane rules to underground construction and demolition that were already being used by other construction sectors, and has streamlined federal OSHA's standards by eliminating the separate Cranes and Derricks Standard currently used for underground and demolition work.

The Direct Final Rule also corrected several errors introduced in the 2010 rulemaking. To cover all construction work under Subpart CC, and to correct errors, federal OSHA has amended §§1926.856(c) and 1926.858(b) by replacing the requirements to comply with Subpart DD with requirements to comply with Subpart CC, and has amended §1926.858(b) by reinstating the requirement to comply with Subpart N as well.

Also, federal OSHA has amended §1926.800(t) to extend Subpart CC to underground construction, and to resolve the technical errors set forth in that section. Federal OSHA has amended the introductory paragraph of §1926.800(t) to restore the provision allowing employers to use cranes to hoist personnel for routine access to the underground worksites via a shaft without the need to show that conventional means of access are more hazardous or impossible for this purpose. This amendment excepts routine access of employees to an underground worksite via a shaft from the requirements of §1926.1431(a), requirements that are virtually identical to the requirements of §1926.550(g)(2). Federal OSHA has also restored §1926.800(t)(1) through (4). Also, OSHA has corrected three minor grammatical errors that appeared in the text of paragraphs §1926.800(t)(3)(vi), (t)(4)(iii), and (t)(4)(iv), as previously published in the Code of Federal Regulations.

### **III. Implementation Schedule.**

**CHANGE I:** All provisions are effective on April 15, 2011, except for:

§1926.1427 (k), Phase-in, there is a four-year compliance period for the crane operator certification/qualification requirement, i.e., Virginia employers must be in compliance by April 15, 2015.

**CHANGE I**

**CRANES AND DERRICKS IN CONSTRUCTION, §§ 1926.1400 through 1926.1442; REVISED FINAL RULE,  
AND OTHER RELATED STANDARDS**

As adopted by the

Safety and Health Codes Board

Date: January 20, 2011



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective date: April 15, 2011

16 VAC 25-175-1926.6  
16 VAC 25-175-1926.31  
16 VAC 25-175-1926.450  
16 VAC 25-175-1926.500  
16 VAC 25-175-1926.1500  
16 VAC 25-175-1926.550  
16 VAC 25-175-1926.553  
16 VAC 25-175-1926.600  
16 VAC 25-175-1926.753

16 VAC 25-175-1926.800  
16 VAC 25-175-1926.856  
16 VAC 25-175-1926.858  
16 VAC 25-175-1926.952  
16 VAC 25-175-1926.1050  
16 VAC 25-175-1926.1400 through  
16 VAC 175-1926.1442  
Subparts AA and BB



When the regulations, as set forth in federal OSHA's revised Final Rule to Cranes and Derricks in Construction, §§1926.1400 through 1926.1442, and other related standards, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

November 8, 2010

April 15, 2011

**CRANES AND DERRICKS IN CONSTRUCTION; Direct Final Rule,  
Demolition and Underground Construction**

As adopted by the

Safety and Health Codes Board

Date: September 12, 2012



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective date: January 1, 2013

16VAC25-175-1926.856, Removal of Walls, Floors and Material with Equipment, §1926.856

16VAC25-175-1926.858, Removal of Steel Construction, §1926.858

16VAC25-175-19226.800, Underground Construction, §1926.800

When the regulations, as set forth in the Direct Final Rule to Cranes and Derricks in Construction: Demolition and Underground Construction, §§1926.856, 1926.858 and 1926.800, respectively, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

November 15, 2012

January 1, 2013